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U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

Atty Docket No.: 266490US29

FORM PTO-1595  
06-04

To the Director of the United States Patent and Trademark Office. Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

nCUBE Corporation

2. Name and address of receiving party(ies):

Name: Broadband Management Solutions LLC

Address: 60 Decibel Road  
State College, Pennsylvania 16801

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of Conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other

Execution Date: December 31, 2004

Additional name(s) and address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

☐ This document is being filed together with a new application

A. Patent Application No.(s)

PLEASE SEE ATTACHED ADDENDUM

B. Patent No.(s)

PLEASE SEE ATTACHED ADDENDUM

Additional numbers attached? ☒ Yes ☐ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Customer Number

22850

Tel. (703) 413-3000

Fax. (703) 413-2220

6. Total applications and patents involved: 35

7. Total fee (37 CFR 3.41): \$1,400.00

- ☒ Enclosed  
☐ Authorized to be charged to deposit account

8. Deposit account number: 15-0030  
(Attach duplicate copy of this page if paying by deposit account)

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9. Statement and signature

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*

Michael Monaco

Name of Person Signing

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Signature

2/24/05  
Date

Registration Number: 52,041

Total number of pages including this cover sheet: 12

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Mail documents to be recorded with required cover sheet information to:

Director of the United States Patent and Trademark Office  
Mail Stop Assignment Recordation Services  
Alexandria, Virginia. 22313

## ADDENDUM

### 4. (A) Application Numbers:

09/128,244  
09/327,132  
09/327,133  
09/615,468  
09/653,039  
09/699,236  
09/759,935  
10/877,856  
10/639,006  
10/693,280  
60/520,359  
60/552,060  
10/234,885  
10/695,663

### 4. (B) Patent Numbers:

5,623,595  
5,655,117  
5,659,539  
5,805,804  
5,826,085  
5,864,682  
5,878,220  
6,009,473  
6,055,577  
6,070,172  
6,112,226  
6,119,154  
6,138,147  
6,578,070  
4,729,095  
5,113,523  
5,367,636  
5,638,516  
5,424,770  
5,499,046  
5,594,490

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ASSIGNMENT OF BUSINESS INTELLECTUAL PROPERTY

WHEREAS, nCUBE Corporation, a Delaware corporation ("nCUBE"), and Broadband Management Solutions, LLC, a Delaware limited liability company (hereinafter referred to as "ASSIGNEE") have entered into a certain Member Interest Purchase Agreement executed on October 20, 2004 (hereinafter the "AGREEMENT");

WHEREAS, nCUBE is either the sole and exclusive owner or a co-owner of all Business Intellectual Property (as that term is defined in the AGREEMENT, including but not limited to all intellectual property listed in Schedule 4.11(a) of the AGREEMENT; a copy of Schedule 4.11(a) is attached hereto as APPENDIX A);

WHEREAS, ASSIGNEE is desirous of acquiring the entire right, title and interest of nCUBE in and to all of said Business Intellectual Property, including but not limited to all applications for Letters Patent and Trademark registrations and trademark applications, the inventions and marks described therein, and in and to any and all trademark registrations and Letters Patents that may be granted therefor in the United States and its territorial possessions, including all rights to sue for all present and future infringement, and all infringement prior to the date of this assignment; and including the rights of nCUBE in the litigations between nCUBE and SeaChange as denoted in APPENDIX B, subject to the provisions set forth in the AGREEMENT ("SEACHANGE LITIGATIONS");

NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00) and other valuable consideration, the receipt of which is hereby acknowledged, nCUBE by these presents does sell, assign and transfer unto said ASSIGNEE its entire right, title and interest in and to the aforesaid Business Intellectual Property, including but not limited to all applications for Letters

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Patent and Trademark registrations and trademark applications, and together with the goodwill connected with and symbolized by the trademarks, the inventions and marks described therein, and in and to any and all Trademark registrations and Letters Patents that may be granted therefor in the United States and its territorial possessions, in and to any and all divisions, continuations, reissues, substitutions and renewals thereof, including all rights to sue for all present and future infringement, and all infringement prior to the date of this assignment, and, pursuant to the provisions set forth in the AGREEMENT, its right, title and interest in and to the SEACHANGE LITIGATIONS.

nCUBE hereby authorizes and requests that the United States Patent and Trademark Office in the United States and its territorial possessions issue any and all of said Letters Patents or Trademark registrations, when granted, to said ASSIGNEE as the assignee of the entire right, title and interest in and to the same, for the use and behoof of said ASSIGNEE, its successors and assigns, to the full end of the term for which said Letters Patents and Trademark registrations may be granted, with said ASSIGNEE having the sole right to renewals of the Trademark registrations, as fully and entirely as the same would have been held by nCUBE had this Assignment and sale not been made.

[remainder of page intentionally left blank]

IN TESTIMONY WHEREOF, NCUBE has caused these presents to be signed by its  
officers hereunto duly authorized.

Date: December 31, 2004

nCUBE Corporation

By:   
Name: Steven B. Fink  
Title: Chairman

Best Available Copy

**APPENDIX A****Schedule 4.11(a)****Registered Intellectual Property; Licenses**

Type	Number	Filing/Grant Dates	Title/Description	Locations	Comments
Granted	5,623,595	Filed: 9/26/94 Issued: 4/22/97	METHOD AND APPARATUS FOR TRANSPARENT, REAL TIME RECONSTRUCTION OF CORRUPTED DATA IN A REDUNDANT ARRAY DATA STORAGE SYSTEM	US CAN GMBH UK	Jointly Owned with Thirdspace/Alcatel
Granted	5,655,117	Filed: 9/24/96 Issued: 8/5/97	METHOD AND APPARATUS FOR INDEXING MULTIMEDIA INFORMATION STREAMS WITH A PORTABLE AND EXTENSIBLE FILE FORMAT	US UK	Jointly Owned with Thirdspace/Alcatel
Granted	5,659,539	Filed: 7/14/95 Issued: 8/19/97	METHOD AND APPARATUS FOR FRAME ACCURATE ACCESS OF DIGITAL AUDIO VISUAL INFORMATION	US CAN EPO	Jointly Owned with Thirdspace/Alcatel
Granted	5,805,804	Filed: 3/12/97 Issued: 9/8/98	METHOD AND APPARATUS FOR SCALABLE, HIGH BANDWIDTH STORAGE RETRIEVAL AND TRANSPORTATION OF MULTIMEDIA DATA ON A NETWORK	US	Jointly Owned with Thirdspace/Alcatel
Granted	5,826,085	Filed: 7/12/95 Issued: 10/20/98	OBJECT ORIENTED COMPUTER INTERFACE SUPPORTING INTERACTIVE NETWORKED APPLICATIONS	US	Jointly Owned with Thirdspace/Alcatel
Granted	5,864,682	Filed: 5/21/97 Issued: 1/26/99	METHOD AND APPARATUS FOR FRAME ACCURATE ACCESS OF DIGITAL AUDIO-VISUAL INFORMATION	US CAN	Jointly Owned with Thirdspace/Alcatel
Granted	5,878,220	Filed: 11/4/97 Issued: 3/2/99	METHOD AND APPARATUS FOR STORING AND TRANSFERRING DATA ON A NETWORK	US	Jointly Owned with Thirdspace/Alcatel
Granted	6,009,473	Filed: 4/30/97 Issued: 12/28/99	USING CALLBACKS TO EFFECTIVELY MANAGE RESOURCES	US	Jointly Owned with Thirdspace/Alcatel
Granted	6,055,571	Filed: 5/6/96 Issued: 4/25/00	SYSTEM FOR GRANTING BANDWIDTH FOR NON-REAL TIME PROCESSES AND ASSIGNING BANDWIDTH FOR NON-REAL TIME PROCESSES	US	Jointly Owned with Thirdspace/Alcatel

Type	Number	Filing/Grant Dates	Title/Description	Locations	Comments
			WHILE BEING FORCED TO PERIODICALLY RE-ARBITRATE FOR NEW ASSIGNED BANDWIDTH		
Granted	6,070,172	Filed: 3/6/97 Issued: 5/30/00	ON-LINE FREE SPACE DE- FRAGMENTATION	US	Jointly Owned with Thirdspace/Alcatel
Granted	6,112,226	Filed: 11/22/97 Issued: 8/29/00	A METHOD AND APPARATUS FOR CONCURRENTLY ENCODING AND TAGGING DIGITAL INFORMATION FOR ALLOWING NON-SEQUENTIAL ACCESS DURING PLAYBACK	US JAPAN CAN AUS EPO HK	Jointly Owned with Thirdspace/Alcatel
Granted	6,119,154	Filed: 10/22/97 Issued: 9/12/00	METHOD AND APPARATUS FOR NON-SEQUENTIAL ACCESS TO AN IN-PROGRESS VIDEO FEED	US EPO JAPAN CAN AUS HK	Jointly Owned with Thirdspace/Alcatel
Granted	6,138,147	Filed: 10/22/97 Issued: 10/24/00	METHOD AND APPARATUS FOR IMPLEMENTING SEAMLESS PLAYBACK OF CONTINUOUS MEDIA FEEDS	US AUS EPO HK JAPAN CAN	Jointly Owned with Thirdspace/Alcatel
Granted	6,578,070	Filed: 7/13/99 Issued: 6/10/03	METHOD AND APPARATUS FOR IMPLEMENTING SEAMLESS PLAYBACK OF CONTINUOUS MEDIA FEEDS	US	Jointly Owned with Thirdspace/Alcatel  Previous application number 09/352/630
Application	09/128,244	Filed 8/3/98	DYNAMIC QUALITY ADJUSTMENT BASED ON STREAMING Constraints	US	Jointly Owned with Thirdspace/Alcatel
Application	09/327,132	Filed: 6/7/99	SYSTEM AND METHOD FOR SECURE DISTRIBUTION OF DIGITAL MEDIA TO A PLAYBACK LOCATION	US	Jointly Owned with Thirdspace/Alcatel
Application	09/327,133	Filed: 6/7/99	SYSTEM AND METHOD FOR CONTROLLING PLAYBACK OF DIGITAL MEDIA IN A PLAYBACK LOCATION	US	Jointly Owned with Thirdspace/Alcatel
Application*	09/615,468	Filed: 7/13/00	DYNAMIC GENERATION OF VIDEO CONTENT FOR PRESENTATION BY A MEDIA SERVER	US KOR TAIW RUSS AUS VIETN BRAZ EPO MEX INDIA NZ CHINA SING HK CAN CHILE ISRAEL JAPAN	Jointly Owned with Thirdspace/Alcatel
Application	09/653,039	Filed: 9/1/00	DYNAMIC QUALITY ADJUSTMENT BASED ON CHANGING STREAMING CONSTRAINTS	US KOR TAIW RUSS AUS VIETN BRAZ EPO MEX INDIA NZ CHINA	Jointly Owned with Thirdspace/Alcatel

Type	Number	Filing/Grant Dates	Title/Description	Locations	Comments
				SING CAN CHILE ISRAEL JAPAN	
Granted	4,729,095	Filed: 5/19/86 Issued: 3/1/99	BROADCAST INSTRUCTION FOR USE IN A HIGH PERFORMANCE COMPUTER SYSTEM	US	nCUBE - Colley
Granted	5,113,523	Filed: 5/6/85 Issued: 5/12/92	HIGH PERFORMANCE COMPUTER SYSTEM	US GMBH FRANCE ITALY JAPAN UK	nCUBE - Colley
Granted	5,367,636	Filed: 11/1/93 Issued: 11/22/94	<i>HYPERCUBE PROCESSOR NETWORK IN WHICH THE PROCESSOR IDENTIFICATION NUMBERS OF TWO PROCESSORS CONNECTED TO EACH OTHER THROUGH PORT NUMBER N, VARY ONLY IN THE NTH BIT</i>	US	nCUBE - Colley, Kenoyer
Granted	5,638,516	Filed: 8/1/94 Issued: 6/10/97	PARALLEL PROCESSOR THAT ROUTES MESSAGES AROUND BLOCKED OR FAULTY NODES BY SELECTING AN OUTPUT PORT TO A SUBSEQUENT NODE FROM A PORT VECTOR AND TRANSMITTING A ROUTE READY SIGNAL BACK TO A PREVIOUS NODE	US EPO JAPAN KOR AUS CAN	nCUBE - Duxett
Granted	5,424,770	Filed: 9/15/94 Issued: 6/13/95	METHOD AND APPARATUS FOR AUTOMATIC INSERTION OF A TELEVISION SIGNAL FROM A REMOTE SOURCE	US	nCUBE - Schmelzer  Ad Insertion Tech - SkyConnect
Granted	5,499,046	Filed: 5/23/94 Issued: 3/12/96	CATV DISTRIBUTION SYSTEM WITH EACH CHANNEL HAVING ITS OWN REMOTE SCHEDULER	US	nCUBE - Schiller/Schmelzer  Ad Insertion Tech - SkyConnect
Granted	5,594,490	Filed: 5/23/94 Issued: 1/14/97	SYSTEM FOR DISTRIBUTING VIDEO/AUDIO FILES FROM CENTRAL LOCATION TO A PLURALITY OF CABLE HEADENDS	US	nCUBE - Dawson/Schiller/S chmelzer  Ad Insertion Tech - SkyConnect
Application	09/699,236	Filed: 10/27/00	ADAPTIVE BANDWIDTH SYSTEM AND METHOD FOR BROADCAST DATA	US SING AUS HK BRAZ CAN CHINA CHILE EPO ISRAEL JAPAN KOR NZ	nCUBE - Sheeran



Type	Number	Filing/Grant Dates	Title/Description	Locations	Comments
Application	09/759,935	Filed: 1/12/01	METHOD AND APPARATUS FOR IDENTIFYING A SIGNAL ROUTE FOR DELIVERY OF VIDEO-ON-DEMAND TO A SUBSCRIBER TERMINAL	US AUS BRAZ CAN CHILE CHINA EPO ISRAEL JAPAN KOR MEX NZ SING	nCUBE - Schiller/Poole
Application	10/877,856	Filed: 6/25/2004	SYSTEM AND METHOD FOR DELIVERING VIDEO PROGRAMS TO A VIDEO DISTRIBUTION CENTER	US	nCUBE - Schiller
Application	10/639,006	Filed: 8/11/2003	OPTIMAL PROVISIONING AND MANAGEMENT OF BANDWIDTH IN A VIDEO ON DEMAND SERVICES ARCHITECTURE	US PCT	nCUBE - Matsvenc
Application	10/693,280	Filed: 10/23/2003	A SYSTEM AND METHOD FOR PROVIDING ADVERTISING AFTER A VIDEO PROGRAM HAS BEEN PAUSED	US	nCUBE - Czech
Prov Appl.	60/520,359	Filed 11/13/2003	METHOD AND MECHANISMS FOR EFFICIENT, SCALABLE DELIVERY OF INTERACTIVE PROGRAM DATA	US	nCUBE - Aaby/Parker
Prov Appl.	60/552,060	Filed 3/9/2004	ADVERTISING INSERTION AND VIDEO ON DEMAND	US	nCUBE - Schiller
Application	TBA	Filed: 4/26/2004	CACHE MEMORY FOR A SCALABLE INFORMATION DISTRIBUTION SYSTEME	US PCT	nCUBE - Duzett
Application*	10/234,885	Filed 9/3/2002	DIGITAL MESSAGE INSERTION TECHNIQUE FOR ANALOG VIDEO SERVICES	US CL TW PCT	nCUBE
Application*	10/695,663	Filed 10/29/2003	METHOD FOR PROVIDING TRIGGERED EVENT COMMANDS VIA DIGITAL PROGRAM INSERTIONS SPLICING	US	nCUBE / ACTV

\*Indicates that the Application has been or, prior to Closing, will be, abandoned by Seller.  
Seller will not maintain these applications as pending pursuant to Section 10.1(b) of the Purchase Agreement.

Trademarks:

U.S. Trademark Applications and Registrations

Trademark	App. No.	Filing Date	Reg. No.	Reg. Date	Status/Comments
N4	78/039480	15-Dec-2000	2757421	26-Aug-2003	Registered. Section 8 & 15 Affidavits of Use and Incontestability due by August 26, 2009.
N5	78/039482	15-Dec-2000			Pending.
N6	78/039485	15-Dec-2000			Pending.
NCUBE	73/711880	16-Feb-1988	1745549	12-Jan-1993	Registered.  Renewal due by January 12, 2013.
nCUBE (Stylized)  nCUBE	74/253165	09-Mar-1992	1732719	17-Nov-1992	Registered.  Renewal due by November 17, 2012.
SKYCONNECT	74/546487	01-Jul-1994	1918373	12-Sep-1995	Registered.  Renewal due by September 12, 2005.
VIRTUAL INTERCONNECT	76/397528	19-Apr-2002	2828678	30-Mar-2004	Registered. Supplemental Register. Section 8 Affidavit of Use due by March 30, 2010.

## Foreign Trademark Registrations

Country	Trademark	App. No.	Filing Date	Reg. No.	Reg. Date	Status/Comments
Australia	NCUBE (Stylized)	614313	20-Oct-1993	A614313	25-Jul-1995	Renewal due by October 20, 2010.
Australia	NCUBE	586235	09-Sep-1992	A586235	30-May-1995	Renewal due by September 9, 2009.
Canada	NCUBE	795306	19-Oct-1995	TMA463064	06-Sep-1996	Renewal due by September 6, 2011.
France	NCUBE (Stylized)	92431218	20-Aug-1992	92431218	29-Jan-1993	Renewal due by August 20, 2102.
Germany	INFOCUBE	39553000	30-Dec-1995	39553000	15-Jul-1996	Renewal due by December 30, 2005.
Germany	NCUBE (Stylized)	25021/9	21-Jul-1992	2058894	04-Mar-1993	Renewal due by July 21, 2012.
Italy	NCUBE (Stylized)	RM92C/003	07-Aug-1992	643872	28-Feb-1995	Renewal due by August 7, 2012.
Korea, Republic of	NCUBE (Stylized)	20575/1992	24-Jul-1992	282662	04-Jan-1994	Renewal due by January 4, 2014.
South Africa	NCUBE (Stylized)	94/1553	15-Feb-1994	94/1553	15-Feb-1994	Renewal due by February 15, 2014.

Country	Trademark	App. No.	Filing Date	Reg. No.	Reg. Date	Status/Comments
United Kingdom	NCUBE (Stylized)	1507140	09-Mar-1992	1507140	06-Oct-1995	Renewal due by March 9, 2009.
United Kingdom	INFOCUBE	2050301	04-Jan-1996	2050301	13-Jun-1997	Renewal due by January 4, 2006.
United Kingdom	MEDIACUBE	2050300	04-Jan-1996	2050300	01-Nov-1996	Renewal due by January 4, 2006.

#### U.S. Copyright Registrations

Title	Description	Registration No.	Registration Date
TESS 2	4 semiconductor chips in housings & 11 plots.	MW6310	16-Mar-1989
Ncube 3 Processor B-Step	4 semiconductor chips in housings, 12 plots & col. composite plot.	MW12882	05-May-1997
Ncube 3 Processor C-Step	4 semiconductor chips in housings, 12 plots & 2 col. composite plots.	MW12883	05-May-1997
VC2644	4 semiconductor chips & plots of 9 layers.	MW2928	17-July-1987

Joint Patent Ownership Agreement by and between nCUBE Corporation and Thirdspace Living Ltd., dated October 4, 2000

See also the agreements listed on Schedule 4.11(d).

**APPENDIX B**  
**SEACHANGE LITIGATIONS**

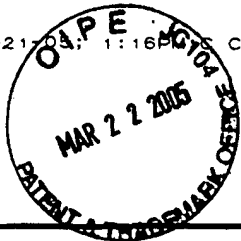
SeaChange International, Inc., v. nCube Corporation U.S.D.C., District of Delaware,  
Civil Action No. 00-568-JJF.

SeaChange International, Inc. v. nCube Corporation, C.A.F.C. Case No. 04-1375, -1498.

nCube Corporation v. SeaChange International Inc., U.S.D.C., District of Delaware, Civil  
Action No. 01-11-JJF.

nCube Corporation v. SeaChange International, Inc., C.A.F.C. Case No. 03-1341, -1366.

nCube Corporation v. SeaChange International, Inc. U.S.D.C., District of Delaware, Civil  
Action No. 02-228-JJF.

**GENERAL POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE  
UNITED STATES PATENT AND TRADEMARK OFFICE**

I hereby appoint:

☒ Practitioners associated with the Customer Number**22850**

as attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignment documents attached to this form in accordance with 37 CFR 3.73(b).

Assignee Name and Address:

Broadband Management Solutions LLC  
60 Decibel Road  
State College, Pennsylvania 16801

**A statement under 37 CFR 3.73(b) is attached.****SIGNATURE OF ASSIGNEE OF RECORD**

The individual whose signature and title is supplied below is authorized to act on behalf of the assignee

Signature	<i>WTHaney</i>	Date:	<i>3/21/05</i>
Name	<i>WTHaney</i>	Telephone:	<i>814 231 4446</i>
Title	<i>CFO</i>		



**STATEMENT UNDER 37 CFR 3.73(b)**

Applicant/Patent Owner: Jay B. SCHILLER, et al.

Application No./Patent No.: 09/759,935

Filed/Issue Date: January 12, 2001

Entitled: METHOD AND APPARATUS FOR IDENTIFYING A SIGNAL ROUTE FOR DELIVERY OF VIDEO-ON-DEMAND TO A SUBSCRIBER TERMINAL

Broadband Management Solutions LLC

(Name of Assignee)

, a Limited Liability Company

(Type of Assignee, e.g., corporation, partnership, government agency, etc.)

States that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.

The extent (by, percentage) of its ownership interest is \_\_\_\_\_%

in the patent application/patent identified above by virtue of an assignment from the inventor(s) of the patent application/patent identified above. A copy of the assignment is attached.

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Signature

3/23/05

Date

Michael E. Monaco

Printed or Typed Name

703-413-3000

Telephone Number

52,041

Registration Number



**CHANGE OF  
CORRESPONDENCE ADDRESS**  
*Application*

Address to:  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Application Number	09/759,935
Filing Date	January 12, 2001
First Named Inventor	Jay B. SCHILLER, et al.
Art Unit	2611
Examiner Name	FAILE, A.
Attorney Docket Number	267644US28

Please change the Correspondence Address for the above-identified patent application to:

☒ The address associated with Customer Number:

**22850**

I am the:

- ☐ Applicant/Inventor
- ☐ Assignee of record of the entire interest.  
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)
- ☒ Attorney or agent of record. Registration Number 52,041
- ☐ Registered practitioner named in the application transmittal letter in an application without an  
Executed oath or declaration. See 37 CFR 1.33(a)(1). Registration Number \_\_\_\_\_

Signature

Typed or Printed Name

Michael E. Monaco

Date

3/23/05

Telephone

703-413-3000

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

☐ \*Total of \_\_\_\_\_ forms are submitted.